Claims 1-21 (Cancelled)

22. (new) A process for the processing of fruits of the type comprising whole oil-producing drupes with skins, pulp and stones containing kernels, said process comprising the steps of :

a) preheating the whole drupes under controlled conditions for carrying out a controlled preheating limited to the water contained in the pulp, and under conditions which substantially avoid the oxidation of the pulp's natural antioxidants;

b) effecting a rapid or virtually instantaneous evaporation of a fraction of the preheated water contained in the pulp, favoring cellular destructuring limited to the pulp with incipient detachment of the pulp from the skins and stones, under conditions which substantially avoid the oxidation of the pulp's natural antioxidants;

c) separating and recovering the pulp resulting from the cellular destructuring due to the partial evaporation of the water, essentially devoid of stones and skins, and of the stones with the skins, essentially devoid of pulp, respectively;

d) separating pulp oil and the destructured pulp in the form of partially de-oiled purée, respectively; and

e) recovering the pulp oil essentially devoid of oil derived from the stones and skins and containing the pulp's natural antioxidants, thereby improving the oxidation resistance of said oil.

23. (new) The process according to claim 22 wherein the preheating is carried out in a heating enclosure protected from oxidation, in a predetermined temperature range and for a predetermined period of time which entail substantially no risk of degradation of the pulp, this preheating step being effected by means of any direct or indirect heating system

24. (new) The process according to claim 22 wherein the preheating is effected by microwave emission so that the temperature reached by the water contained in the pulp is sufficient to favor the rapid or virtually instantaneous evaporation of the fraction of said water in the evaporation step b), the preheating being effected in a heating enclosure so that the temperature reached by the water contained in the pulp is in the order of 80°C to 90°C.

25. (new) The process according to claim 22 wherein the preheated whole drupes are transferred into an evaporation enclosure maintained at a pressure below atmospheric pressure, in which the evaporation of the fraction of the water

contained in the pulp produces the cellular destructuring with incipient formation of a purée containing the oil, with cooling, and the remaining water and cellular tissues resulting from the burst or disaggregated pulp, together with the whole stones and the skins.

26. (new) The process according to claim 22 wherein the destructured pulp and the whole stones and the skins are separated in a separator refiner, said separator or refiner completing by means of agitation or mechanical friction, the physical refining of the cellular tissues of the pulp and the release and coalescence of the oily formations contained in the destructured pulp, and promoting completing the physical separation of the destructured tissues of the pulp remaining on the stones

27. (new) The process according to claim 26 wherein, the separator or refiner comprises a rotary screen protected from the air.

28. (new) The process according to claim 26, wherein the separator or refiner comprises a rotary screen working under a partial vacuum or an inert atmosphere.

29. (new) The process according of claim 22, wherein the pulp in the form of purée resulting from its cellular destructuring, separated from the stones and skins, is subjected to a phase separation of a solid phase, an aqueous phase, if still present, and an oily phase to give the pulp oil which is essentially pure and essentially devoid of stone oil, kernel oil and skin oil, and which is also substantially devoid of the flavors and tastes peculiar to them.

30. (new) The process according of claim 29, wherein this phase separation is carried out after the purée has passed through a heat exchanger, which controls the temperature of the purée and/or effects a controlled dehydration to substantially completely remove the remaining aqueous phase by evaporation.

31. (new) The process according of claim 22, wherein the stones are separated from the skins by a physical process of separation,

32. (new) The process according of claim 31, wherein said physical process of separation is selected from the group consisting of a process involving meshes of appropriate size, a process involving vibration and a process involving ventilation.

33. (new) The process according of claim 32, wherein said physical process of separation is taking place after the stones and skins have been dried.

34. (new) The process according to claim 31, wherein the stones separated from the skins are then mechanically ground so as to separate a woody shells of the stones from the kernels contained in the stones, which remain whole with their protective epidermis, the kernels being processed by means of an extraction

system used to extract oils from the kernels under pressure, to give a kernel oil of high cosmetic and pharmaceutical value, and a press cake of high nutritional value formed by the at least partially de-oiled tissues of the kernel, which are recovered,

35. (new) The process according to claim 34, wherein the cake is processed further to give an extract and a bitter active principle for medicinal use.

36. (new) The process according to claim 34, wherein olives are processed and the olive cake is processed further to give an extract and a bitter active principle comprising oleuropein.

37. (new) The process of claim 25, wherein the most volatile compounds of the natural odor of the oil-producing drupes, which volatilize in the evaporation enclosure maintained under low pressure, are recovered, by being condensed and concentrated continuously at an outlet of the evaporation enclosure,

38. (new) The process of claim 37, wherein at least a part of the most volatile compounds, recovered, condensed and concentrated, are introduced into the finished oil product, according to different consumers' tastes.

39. (new) The process according to claim 25, wherein the sub-atmospheric pressure ranges between 50 and 100 hectopascals.

40. (new) The process according to claim 22, wherein the oil-producing drupes processed are selected from the group consisting of olives, oil-palm drupes and avocados.

41. (new) An apparatus for the processing of whole oil-producing drupes with skins, pulp and stones containing kernels, said apparatus comprising:

a) at least one device for preheating the whole drupes which effects a preheating limited to the water contained in the pulp under conditions which substantially avoid the oxidation mainly of the pulp's natural antioxidants;

b) at least one sealed enclosure for rapid or virtually instantaneous evaporation of at least part of the water contained in the whole drupe pulp, under conditions which substantially avoid the oxidation mainly of the pulp's natural antioxidants, said rapid or virtually instantaneous evaporation effecting a physical destructuring of the cellular tissues of the pulp with incipient detachment of these destructured cellular tissues from the skins and stones;

c) at least one first separation device for the physical separation and recovery of the pulp essentially devoid of stones and skins, and of the stones and skins essentially devoid of pulp, under conditions which substantially avoid oxidation,

d) at least one second separation device for the separation and recovery of pulp oil essentially devoid of stone oil and containing the drupe pulp's natural antioxidants, and of a substantially de-oiled pulp.

42. (new) The apparatus according to claim 41, further comprising at least one third separating device for separating the skins from the stones.

43. (new) The apparatus according to claim 42, further comprising at least one grinding or crushing device for mechanically grinding or crushing the stones to produce woody shells of the stones under conditions which preserve the integrity of the kernels contained in the stones, these kernels remaining whole in their epidermis, and at least one device for mechanically separating the woody shells of the stones from the kernels.

44. (new) The apparatus according to claim 43, further comprising at least one extracting device for extracting oil contained in said separated kernels,

45. (new) The apparatus according to claim 44, wherein said at least one extracting device comprises a pressing device, with recovery of the oil from the kernels and of a press cake,

46. (new) The apparatus according to claim 45, wherein said press cake is subjected to a further extraction device for extraction of a bitter active principle.

47. (new) The apparatus according to claim 46, wherein olives are processed and the bitter active ingredient comprises oleuropein.

48. (new) The apparatus according to claim 41, wherein the device for preheating the whole drupes comprises means of heating with the aid of microwave emitters, which are intended to heat the water contained at least in the pulp to a temperature of between 80 and 90°C.

49. (new) The apparatus according to claim 41, wherein the first separation device for physical separation is located in said sealed enclosure.

50. (new) The apparatus according to claim 41, wherein the sealed evaporation enclosure is maintained at a pressure below atmospheric pressure, in which the evaporation of the fraction of the water contained in the pulp produces the cellular destructuring with incipient formation of a purée containing the oil, with cooling, and the remaining water and cellular tissues resulting from the burst or disaggregated pulp, together with the whole stones and the skins.

51. (new) The apparatus according to claim 41, wherein at least one of the first separation device comprises a screening device provided with a screen located in said sealed evaporation enclosure working under a partial vacuum or an inert

atmosphere, said screening device being physically located in said sealed enclosure to provide a bottom enclosure part defining a chamber for collecting the pulp passing through the screen turning in the form of a puree, whereas the skins and stones are separated off by the screen and exit the sealed enclosure at a discharge office for further separation.

52. (new) The apparatus according to claim 41, wherein the at least one second separation device is subjecting the pulp in the form of a purée resulting from its cellular destructuring, separated from the stones and skins, to a phase separation of a solid phase, an aqueous phase, if still present, and an oily phase to give the pulp oil which is essentially pure and essentially devoid of stone oil, kernel oil and skin oil, and which is also substantially devoid of the flavors and tastes peculiar to them.